

REMARKS

Claims 17, 18, and 46-95 are pending in the present application. Claims 46, 47, 2-54, 58-60, 64, 65, 70-72, 76-77, 82-83, 87, 90, and 92-95 have been amended. The amendments are supported throughout the specification, e.g., at page 11, line 34 to page 12, line 2 and at page 10, lines 26-28. No new matter is added by the amendments.

Applicants note that claims 17 and 18 are indicated in the Office Action Summary to be rejected, however, the reason for rejecting these claims is not mentioned in the Detailed Action. Any cancellations or amendments to the claims are not to be construed as surrendering the right to prosecute cancelled or amended matter in future prosecution.

Summary of Telephone Conferences

Applicant thanks the examiner for the telephone conferences with the applicant's representative, Lisa Geller, on December 29, 2003 and December 30, 2003, clarifying some of the examiner's positions. Possible amendments to the claims were discussed, particularly amendment of certain claims to "consisting of" language. The examiner agreed that, with amendment, at least some of the claims were allowable. The basis of the objections was also discussed as indicated below.

Objections

Claims 49-51, 55-57, 61-63, 67-69, 73-75, 79-81, 84-86, 88-89, and 91, were objected to as being dependent upon a rejected base claim. Applicant's understanding is that the term "objection" is applied when the form, and not the substance, of a claim is improper (MPEP § 706.01). Accordingly, it was applicant's understanding that the claims that were objected to would be allowable if rewritten to be independent of rejected claims. However, in a telephone conference with the examiner on December 29, 2003, the examiner indicated that these claims would be allowable only if the claims from which they depend were amended. Accordingly, the objected to claims are addressed herein as if they were rejected claims.

Applicant believes that in view of the amendments and arguments presented herein, all of the claims that have been objected to depend from allowable claims and accordingly are themselves allowable. Therefore, applicant requests that the objections be withdrawn.

35 U.S.C. § 102 (b)

Catalog references

Claims 46, 52, 58, 64, 70, 76, and 82 have been rejected as anticipated in view of Boehringer Mannheim Biochemicals (1991 Catalog, p. 557), Stratagene (1991 Product Catalog, p. 66), Gibco BRL (Catalogue & Reference Guide, 1992, p. 292), Promega (1993/1994 Catalog, pp. 90-91), or New England BioLabs (Catalog 1986/1987, p. 60-62). These are collectively referred to herein as "catalog references." Applicant respectfully traverses the rejection.

To anticipate a claim, every feature of the claim must be contained in the reference. Amended claims 46, 52, 58, 64, 70, 76, and 82 are drawn to an isolated and purified nucleic acid molecule that is at least 50 nucleotides in length and that hybridizes to specific sequences under specified conditions. Applicant believes that none of the sequences in the catalog references that are cited by the examiner are 50 nucleotides in length. Accordingly, none of the cited catalog references can anticipate claims 46, 52, 58, 64, 70, 76, and 82.

Groisman et al.

Claims 47-48, 53-54, 59-60, 65-66, 71-72, 77-78, 83, 87, and 90-95 are rejected in view of Groisman et al. (1993, EMBO J. 3779-3789). Applicants respectfully traverse the rejection.

The examiner believes that the 6.4 kb insert of RF319 that is disclosed in Groisman et al. includes claimed sequences. RF319 includes multiple sequences including sequences encoding spa proteins. Claims 47, 53, 54, 59, 60, 65, 71, 72, 77, and 83 have been amended to indicate that a claimed isolated and purified nucleic acid molecule is free of nucleic acid sequences that flank the nucleic acid molecule in the naturally-occurring genome from which the nucleic acid molecule is derived. Regardless of whether RF319 contains any of the claimed sequences, the sequences contained in RF319 are clearly not free of flanking nucleic acid sequences since, as

indicated by the examiner (Office Action at page 4), they include nucleic acid molecules (e.g., spa proteins) that are not part of the claimed sequences (see also, Fig. 1 of Groisman).

Therefore, Groisman et al. does not anticipate the pending claims. Claims 48, 66, 78 depend from claims 47, 65, and 77, respectively. Since claims 47, 65, and 77 are not anticipated by the Groisman et al., neither are the claims that depend from them.

Claims 87 and 90-95 have been amended to "consisting of" language. Since Groisman et al. does not disclose sequences consisting of the claimed sequences, the reference does not anticipate the claimed sequences. Applicant notes that in discussions with his representative, the examiner indicated that such language was likely to be allowable.

Collazo et al.

Claims 47, 48, 53, 54, 59, 60, 65, 66, 71, 72, 77, 78, 83, 87, and 90-95 have been rejected in view of Collazo et al. (1989, *Molec. Microbiol.* 15:26-38). Applicant disagrees with the rejection.

The examiner believes that the plasmid pYA2225 that was disclosed in Collazo et al. contained sequences claimed in the present application. pYA2225 carries a region of the Inv locus that contains the invI and invJ genes.

Claims 47, 53, 54, 59, 60, 65, 71, 72, 77, and 83 have been amended to specify an "isolated and purified nucleic acid molecule that is free of the nucleic acid sequences that flank the nucleic acid molecule in the naturally-occurring genome of the organism from which the nucleic acid molecule is derived." Regardless of whether pYA2225 contains claimed sequences, the pYA2225 sequences are not free of flanking nucleic acid sequences since the plasmid at least contains the invI and invJ genes. Therefore, Collazo et al. does not anticipate the pending claims. Claims 48, 66, 78 depend from claims 47, 65, and 77, respectively. Since claims 47, 65, and 77 are not anticipated by the Collazo et al., neither are the claims that depend from them.

Claims 87 and 90-95 have been amended to "consisting of" language. Since Collazo et al. does not disclose sequences consisting of the claimed sequences, the reference does not

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anticipate the claimed sequences. Applicant notes that in discussions with his representative, the examiner indicated that such language was likely to be allowable.

In view of the arguments presented above, applicant respectfully requests that the rejections under 35 U.S.C. § 102 (b) be withdrawn.

CONCLUSION

Applicant believes that in view of the arguments presented herein, all of the claims are in condition for allowance, which action is requested.

Enclosed is a \$55 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050 referencing attorney docket no. 00786-292002.

Respectfully submitted,

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Lisa N. Geller, Ph.D., J.D.
Reg. No. 51,726

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110-2804
Telephone: (617) 542-5070
Facsimile: (617) 542-8906